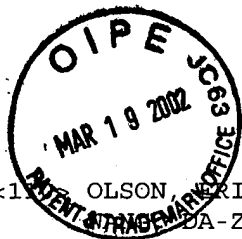


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<1> OLSON, ERIC N.
PATENT & TRADEMARK OFFICE 396
PA-ZHI

<120> METHODS AND COMPOSITIONS RELATING TO A CARDIAC-SPECIFIC
NUCLEAR REGULATORY FACTOR

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Thr Gln Val Val Ser Gln Leu Pro Met Gly Arg Asp Ser Arg Glu Met	
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Leu Phe Leu Ala Glu Gln Pro Pro Leu Pro Pro Pro Pro Leu Leu Pro	
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Pro Ser Leu Thr Asn Gly Thr Thr Ile Pro Thr Ala Lys Ser Thr Pro	
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Arg Ser Lys Lys Ala Lys Glu Leu Lys Pro Lys Val Lys Lys Leu Lys	
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Tyr His Gln Tyr Ile Pro Pro Asp Gln Lys Gln Asp Arg Gly Ala Pro	
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ccc atg gac tca tcc tac gcc aag atc ctg cag cag cag cag ctc ttc	817
Pro Met Asp Ser Ser Tyr Ala Lys Ile Leu Gln Gln Gln Gln Leu Phe	
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Leu Gln Leu Gln Ile Leu Asn Gln Gln Gln Gln Gln His His Asn Tyr	
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Gln Ala Ile Leu Pro Ala Pro Pro Lys Ser Ala Gly Glu Ala Leu Gly	
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Val Ser Gly Thr Lys Thr Glu Leu Ile Glu Arg Leu Arg Ala Tyr Gln	
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Glu Val Val Val Ala Thr Val Ala Ser Ser Gly Val Val Lys Phe Gly	
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Ser Thr Gly Ser Thr Pro Pro Val Ser Pro Thr Pro Ser Glu Arg Ser	

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Leu Leu Ser Thr Gly Asp	Glu Asn Ser Thr Pro	Gly Asp Thr Phe Gly	
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Glu Lys Arg Ala Gln Gln	Pro Ala Pro Ala Pro	Ala Pro Leu Gly Thr	
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ccc gtg aag cag gag aac	agc ttc tcc agc tgc	cag ctg agc cag cag	1777
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Val Val Lys Gln Glu Ala	Leu Gln Pro Glu Pro	Glu Pro Val Pro Ala	
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Pro Gln Leu Leu Leu Gly	Pro Gln Gly Pro Ser	Leu Ile Lys Gly Val	
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gca cct ccc acc ctc atc	acc gac tcc aca ggg	acc cac ctt gtc ctc	2017
Ala Pro Pro Thr Leu Ile	Thr Asp Ser Thr Gly	Thr His Leu Val Leu	
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acc gtg acc aat aag aat	gca gac agc cct ggc	ctg tcc agt ggg agc	2065

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Arg Ala Arg Leu Ala Asp Asp Leu Asn Glu Lys Ile Ala Gln Arg Pro
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Leu Lys Glu Ala Ile Ile Val Gly Gln Val Asn Tyr Pro Lys Val Ala
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Gln Pro Ala Ser His Glu Ser Gln Gly Ser Val Pro Ser Pro Leu Glu
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Gln Val Val Ser Gln Leu Pro Met Gly Arg Asp Ser Arg Glu Met Leu
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Phe Leu Ala Glu Gln Pro Pro Leu Pro Pro Pro Pro Leu Leu Pro Pro
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 Ser Lys Lys Ala Lys Glu Leu Lys Pro Lys Val Lys Lys Leu Lys Tyr
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 His Gln Tyr Ile Pro Pro Asp Gln Lys Gln Asp Arg Gly Ala Pro Pro
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 Met Asp Ser Ser Tyr Ala Lys Ile Leu Gln Gln Gln Gln Leu Phe Leu
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 Gln Leu Gln Ile Leu Asn Gln Gln Gln Gln His His Asn Tyr Gln
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 Ser Leu Thr Gly Lys Pro Gly Ala Leu Pro Ala Asn Leu Asp Asp Met
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 Lys Val Ala Glu Leu Lys Gln Glu Leu Lys Leu Arg Ser Leu Pro Val
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 Ser Gly Thr Lys Thr Glu Leu Ile Glu Arg Leu Arg Ala Tyr Gln Asp
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 Gln Ile Ser Pro Val Pro Gly Ala Pro Lys Ala Pro Ala Ala Thr Ser
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 Ile Leu His Lys Ala Gly Glu Val Val Val Ala Phe Pro Ala Ala Arg
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Leu Gln Glu Lys Asp Lys Gln Ile Glu Ala Leu Thr Arg Met Leu Arg	530		535		540
Gln Lys Gln Gln Leu Val Glu Arg Leu Lys Leu Gln Leu Glu Gln Glu	545		550		555
Lys Arg Ala Gln Gln Pro Ala Pro Ala Pro Ala Pro Leu Gly Thr Pro	565		570		575
Val Lys Gln Glu Asn Ser Phe Ser Ser Cys Gln Leu Ser Gln Gln Pro	580		585		590
Leu Gly Pro Ala His Pro Phe Asn Pro Ser Leu Ala Ala Pro Ala Thr	595		600		605
Asn His Ile Asp Pro Cys Ala Val Ala Pro Gly Pro Pro Ser Val Val	610		615		620
Val Lys Gln Glu Ala Leu Gln Pro Glu Pro Glu Pro Val Pro Ala Pro	625		630		635
Gln Leu Leu Leu Gly Pro Gln Gly Pro Ser Leu Ile Lys Gly Val Ala	645		650		655
Pro Pro Thr Leu Ile Thr Asp Ser Thr Gly Thr His Leu Val Leu Thr	660		665		670
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Val Pro Gln Thr Gln Asp Thr Phe Pro Gln His Val Leu Ser Gln Pro
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Leu Pro Tyr Gln Arg His Pro Ala Pro Ala Val Gln Gln Pro Phe Ile
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Asn Lys Ala Ser Asn Ser Val Leu Gln Ser Arg Asn Ala Pro Leu Pro
85 90 95
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Ala Lys Thr Lys Asp Pro Pro Arg Tyr Glu Glu Ala Ile Lys Gln Thr
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 50 55 60
 Leu Pro Tyr Gln Arg His Pro Ala Pro Ala Val Gln Gln Pro Phe Ile
 65 70 75 80
 Asn Lys Ala Ser Asn Ser Val Leu Gln Ser Arg Asn Ala Pro Leu Pro
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 Ser Leu Gln Asn Gly Pro Asn Thr Pro Asn Lys Pro Ser Ser Pro Pro
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 Pro Pro Gln Gln Phe Val Val Gln His Ser Leu Phe Gly Ser Pro Val
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 Arg Ser Thr Gln Ala Pro Leu Pro Glu Ile Ser Asn Ala His Ser Gln
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 Thr Ala Ser Ile Thr Thr Met Pro Val Asn Thr Val Val Ser Arg Pro
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Pro Pro Gln Val Gln Met Ala Pro Pro Val Ser Leu Glu Pro Met Gly
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 Ser Leu Ser Ala Ser Leu Glu Asn Gln Leu Glu Ala Phe Leu Asp Gly
 225 230 235 240
 Thr Leu Pro Ser Ala Asn Glu Ile Pro Pro Leu Gln Ser Ser Ser Glu
 245 250 255
 Asp Arg Glu Pro Phe Ser Leu Ile Glu Asp Leu Gln Asn Asp Leu Leu
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 Ser His Ser Gly Met Leu Asp His Ser His Ser Pro Met Glu Thr Ser
 275 280 285
 Glu Thr Gln Phe Ala Ala Gly Thr Pro Cys Leu Ser Leu Asp Leu Ser
 290 295 300
 Asp Ser Asn Leu Asp Asn Met Glu Trp Leu Asp Ile Thr Met Pro Asn
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 <211> 35
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Ala Tyr Gln
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Ala Ala Leu
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Ala Ala Leu
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Ala Ala Leu
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<212> PRT
<213> Mus musculus

<400> 17
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Gly Ala Leu
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<212> PRT
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<400> 18
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<212> PRT
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<400> 19
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Lys Ala Val
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<400> 22
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Asn Tyr Val
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<210> 23
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<213> Mus musculus

<400> 23

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<212> PRT

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35 40 45

Gly Ala Gly Ala Ala Gly Gly Ala Gly Cys Thr Thr Gly Gly Ala Gly
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Cys Gly Gly Gly Cys Cys Ala Gly Gly Ala Cys Ala Gly Ala Gly Gly
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100 105 110

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145 150 155 160

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165 170 175

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180 185 190

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195 200 205

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 225 230 235 240
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 245 250 255
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		515						520					525		
Gly	Cys	Thr	Thr	Thr	Thr	Cys	Cys	Thr	Gly	Gly	Cys	Ala	Gly	Ala	Gly
	530						535				540				
Cys	Ala	Gly	Cys	Cys	Thr	Cys	Cys	Thr	Cys	Thr	Gly	Cys	Cys	Thr	Cys
545					550					555					560
Cys	Cys	Cys	Cys	Ala	Cys	Cys	Thr	Cys	Thr	Gly	Cys	Thr	Gly	Cys	Cys
				565					570					575	
Thr	Cys	Cys	Cys	Ala	Gly	Cys	Cys	Thr	Cys	Ala	Cys	Cys	Ala	Ala	Thr
			580					585					590		
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		595					600					605			
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	610					615						620			
Cys	Ala	Cys	Ala	Cys	Thr	Cys	Ala	Thr	Thr	Ala	Ala	Gly	Cys	Ala	Ala
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Ala	Gly	Cys	Cys	Ala	Ala	Cys	Cys	Cys	Ala	Ala	Gly	Thr	Cys	Thr	Gly
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		675					680						685		
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	690					695					700				
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705					710					715					720
Gly	Thr	Ala	Cys	Cys	Ala	Cys	Cys	Ala	Gly	Thr	Ala	Cys	Ala	Thr	Cys
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		755					760						765		
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	770					775					780				
Thr	Ala	Cys	Gly	Cys	Cys	Ala	Ala	Gly	Ala	Thr	Cys	Cys	Thr	Gly	Cys
785					790					795					800

Ala	Gly	Cys	Ala	Gly	Cys	Ala	Gly	Cys	Ala	Gly	Cys	Thr	Cys	Thr	Thr	
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Cys	Cys	Thr	Cys	Cys	Ala	Gly	Cys	Thr	Gly	Cys	Ala	Gly	Ala	Thr	Cys	
820				825				830								
Cys	Thr	Cys	Ala	Ala	Cys	Cys	Ala	Gly	Cys	Ala	Gly	Cys	Ala	Gly	Cys	
835				840				845								
Ala	Gly	Cys	Ala	Gly	Cys	Ala	Cys	Cys	Ala	Cys	Ala	Ala	Cys	Thr	Ala	
850				855				860								
Cys	Cys	Ala	Gly	Gly	Cys	Cys	Ala	Thr	Cys	Cys	Thr	Gly	Cys	Cys	Thr	
865				870				875				880				
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885				890				895								
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900				905				910								
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915				920				925								
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Cys	Cys	Ala	Cys	Thr	Ala	Cys	Cys	Ala	Ala	Thr	Ala	Gly	Cys	Ala	Gly	
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965				970				975								
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980				985				990								
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995				1000				1005								
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1045				1050				1055								
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2225	2230	2235	2240
Cys Ala Ala Gly Cys Cys Ala Gly Cys Ala Gly Ala Thr Gly Gly Ala			
	2245	2250	2255
Cys Gly Ala Cys Cys Thr Gly Thr Thr Thr Gly Ala Cys Ala Thr Thr			

2260	2265	2270
Cys Thr Cys Ala Thr Thr Cys Ala Gly Ala Gly Cys Gly Gly Ala Gly 2275	2280	2285
Ala Ala Ala Thr Thr Thr Cys Ala Gly Cys Ala Gly Ala Thr Thr Thr 2290	2295	2300
Cys Ala Ala Gly Gly Ala Gly Cys Cys Gly Cys Cys Ala Thr Cys Cys 2305	2310	2315 2320
Cys Thr Gly Cys Cys Ala Gly Gly Gly Ala Ala Gly Gly Ala Gly Ala 2325	2330	2335
Ala Gly Cys Cys Ala Thr Cys Cys Cys Cys Gly Ala Ala Gly Ala Cys 2340	2345	2350
Ala Gly Thr Cys Thr Gly Thr Gly Gly Gly Thr Cys Cys Cys Cys Cys 2355	2360	2365
Cys Thr Gly Gly Cys Ala Gly Cys Ala Cys Ala Gly Cys Cys Ala Thr 2370	2375	2380
Cys Ala Cys Cys Thr Thr Cys Thr Gly Cys Thr Gly Ala Gly Cys Thr 2385	2390	2395 2400
Cys Cys Cys Cys Cys Ala Gly Gly Cys Thr Gly Cys Cys Cys Cys Ala 2405	2410	2415
Cys Cys Thr Cys Cys Thr Cys Cys Ala Gly Gly Cys Thr Cys Ala Cys 2420	2425	2430
Cys Cys Thr Cys Cys Cys Thr Cys Cys Cys Thr Gly Gly Ala Cys Gly 2435	2440	2445
Cys Cys Thr Gly Gly Ala Gly Gly Ala Cys Thr Thr Cys Cys Thr Gly 2450	2455	2460
Gly Ala Gly Ala Gly Cys Ala Gly Cys Ala Cys Gly Gly Gly Gly Cys 2465	2470	2475 2480
Thr Gly Cys Cys Cys Cys Thr Gly Cys Thr Gly Ala Cys Cys Ala Gly 2485	2490	2495
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Gly Ala Gly Cys Cys Cys Cys Thr Thr Thr Cys Cys Cys Thr Cys Ala 2515	2520	2525
Thr Thr Gly Ala Cys Gly Ala Cys Cys Thr Cys Cys Ala Thr Ala Gly 2530	2535	2540
Cys Cys Ala Gly Ala Thr Gly Cys Thr Gly Ala Gly Cys Ala Gly Cys 2545	2550	2555 2560

Ala Cys Thr Gly Cys Cys Ala Thr Cys Cys Thr Gly Gly Ala Cys Cys
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Ala Cys Cys Cys Cys Cys Cys Gly Thr Cys Ala Cys Cys Cys Ala Thr
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Gly Gly Ala Cys Ala Cys Cys Thr Cys Gly Gly Ala Ala Thr Thr Gly
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Cys Cys Ala Gly Cys Ala Gly Cys Ala Cys Cys Ala Thr Gly Gly Gly
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Cys Cys Thr Gly Gly Ala Cys Cys Thr Gly Gly Cys Thr Gly Ala Thr
 2645 2650 2655

Gly Gly Cys Cys Ala Cys Cys Thr Gly Gly Ala Cys Ala Gly Cys Ala
 2660 2665 2670

Thr Gly Gly Ala Cys Thr Gly Gly Cys Thr Gly Gly Ala Gly Cys Thr
 2675 2680 2685

Gly Thr Cys Gly Thr Cys Ala Gly Gly Thr Gly Gly Thr Cys Cys Cys
 2690 2695 2700

Gly Thr Gly Cys Thr Gly Ala Gly Cys Cys Thr Ala Gly Cys Cys Cys
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Cys Cys Cys Thr Cys Ala Gly Cys Ala Cys Cys Ala Cys Ala Gly Cys
 2725 2730 2735

Cys Cys Cys Cys Ala Gly Cys Cys Thr Cys Thr Thr Cys Thr Cys Cys
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Gly Cys Cys Ala Thr Gly Ala Thr Thr Thr Gly Cys Ala Gly Cys Thr
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Gly Cys Ala Cys Thr Gly Gly Gly Ala Thr Thr Cys Cys Thr Gly Cys
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Ala Gly Gly Gly Gly Cys Thr Gly Gly Gly Ala Gly Cys Cys Ala Gly
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Gly Cys Thr Cys Thr Cys Cys Thr Gly Cys Gly Thr Gly Ala Thr Thr
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Cys Gly Gly Cys Cys Thr Cys Thr Cys Cys Ala Cys Ala Thr Gly Gly
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Thr Thr Gly Thr Gly Ala Gly Thr Cys Thr Thr Gly Ala Cys Ala Ala
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Gly Cys Thr Ala Gly Ala Ala Cys Ala Gly Ala Gly Ala Ala Gly Cys
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 2995 3000 3005

Ala Gly Ala Ala Gly Cys Ala Gly Cys Cys Cys Thr Gly Gly Cys Thr
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Cys Thr Cys Ala Cys Gly Cys Thr Gly Gly Gly Gly Thr Thr Thr Thr
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Gly Gly Ala Cys Ala Cys Ala Cys Gly Gly Thr Cys Ala Gly Gly Gly
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Ala Gly Gly Thr Cys Ala Gly Gly Gly Gly Gly Cys Ala Cys Thr Gly
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Thr Thr Gly Gly Cys Thr Ala Ala Gly Gly Thr Ala Gly Gly Thr Gly
 3125 3130 3135

Ala Ala Gly Cys Cys Thr Gly Gly Cys Cys Ala Gly Gly Cys Gly Gly

3140	3145	3150
Gly Ala Gly Gly Cys Thr Thr Cys Thr Cys Thr Thr Cys Thr Gly Ala		
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Cys Cys Cys Ala Gly Gly Gly Cys Thr Gly Ala Gly Ala Cys Ala Gly		
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Gly Thr Thr Ala Ala Gly Gly Gly Gly Thr Gly Ala Ala Thr Cys Thr		
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Cys Cys Thr Thr Cys Cys Thr Thr Thr Cys Thr Cys Thr Cys Cys Cys		
	3205	3210 3215
Thr Gly Cys Thr Thr Thr Gly Cys Thr Gly Thr Gly Ala Ala Gly Gly		
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Gly Ala Gly Ala Ala Ala Thr Thr Ala Gly Cys Cys Thr Gly Gly Gly		
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Cys Cys Thr Cys Thr Ala Cys Cys Cys Cys Cys Thr Ala Thr Thr Cys		
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Cys Cys Ala Gly Gly Ala Thr Cys Cys Cys Ala Gly Gly Gly Cys Thr		
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Cys Cys Cys Thr Gly Cys Cys Ala Thr Thr Thr Thr Ala Gly Thr Gly		
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Cys Cys Ala Thr Thr Thr Ala Gly Thr Gly Gly Thr Thr Gly Gly Thr		
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Gly Ala Gly Cys Thr Gly Thr Gly Thr Gly Cys Cys Ala Cys Ala Gly	3490	3495	3500
Thr Cys Thr Gly Gly Thr Gly Cys Cys Cys Ala Gly Thr Cys Thr Gly	3505	3510	3515
Gly Cys Ala Thr Gly Cys Ala Gly Cys Thr Ala Cys Cys Cys Ala Gly	3525	3530	3535
Gly Cys Cys Cys Ala Cys Cys Cys Ala Thr Cys Ala Cys Gly Thr Gly	3540	3545	3550
Thr Gly Ala Thr Thr Gly Ala Cys Ala Thr Gly Thr Ala Gly Gly Thr	3555	3560	3565
Ala Cys Cys Cys Thr Gly Cys Cys Ala Cys Gly Gly Cys Cys Thr Ala	3570	3575	3580
Thr Gly Cys Cys Cys Cys Ala Cys Cys Thr Gly Cys Cys Cys Thr Gly	3585	3590	3595
Cys Thr Thr Cys Cys Thr Gly Gly Cys Thr Cys Cys Thr Thr Ala Thr	3605	3610	3615
Cys Ala Gly Thr Gly Cys Cys Ala Thr Gly Ala Gly Gly Gly Cys Ala	3620	3625	3630
Gly Ala Gly Gly Thr Gly Cys Thr Ala Cys Cys Thr Gly Gly Cys Cys	3635	3640	3645
Thr Thr Cys Cys Thr Gly Cys Cys Ala Gly Gly Ala Gly Cys Thr Cys	3650	3655	3660
Thr Cys Cys Ala Cys Cys Cys Ala Cys Thr Cys Ala Cys Ala Thr Thr	3665	3670	3675
Cys Cys Gly Thr Cys Cys Cys Cys Gly Cys Cys Gly Cys Cys Thr Cys	3685	3690	3695
Ala Cys Thr Gly Cys Ala Gly Cys Cys Ala Gly Cys Gly Thr Gly Gly	3700	3705	3710
Thr Cys Cys Thr Ala Gly Gly Ala Cys Ala Gly Gly Ala Gly Gly Ala	3715	3720	3725

Gly Cys Thr Thr Cys Gly Gly Gly Cys Cys Cys Ala Gly Cys Thr Thr
 3730 3735 3740

Cys Ala Cys Cys Cys Thr Gly Cys Gly Gly Thr Gly Gly Gly Gly Cys
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Thr Gly Ala Gly Gly Gly Gly Thr Gly Gly Cys Cys Ala Thr Cys Thr
 3765 3770 3775

Cys Cys Thr Gly Cys Cys Cys Thr Gly Gly Gly Gly Cys Cys Ala Cys
 3780 3785 3790

Thr Gly Gly Cys Thr Thr Cys Ala Cys Ala Thr Thr Cys Thr Gly Gly
 3795 3800 3805

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Gly Thr Ala Gly Gly Gly Gly Thr Gly Gly Ala Gly Thr Cys Ala Cys
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Ala Cys Ala Ala Ala Gly Ala Thr Gly Gly Gly Gly Ala Ala Gly Gly
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Cys Ala Gly
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 Ser Lys Ala Ala Asp Ala Phe Ala Phe Glu Asp Asp Ser Ser Arg Asp
 20 25 30

ggg ctc tct cca gat cag gct agg agc gag gac ccc cag ggc tct aca	144
Gly Leu Ser Pro Asp Gln Ala Arg Ser Glu Asp Pro Gln Gly Ser Thr	
35 40 45	
gga tcc acc cca gac atc aaa tcc act gag gct cct ctg gac aca atc	192
Gly Ser Thr Pro Asp Ile Lys Ser Thr Glu Ala Pro Leu Asp Thr Ile	
50 55 60	
cag gat ctc act cct ggc tca gaa agt gac aag aat gat gca gcc tcc	240
Gln Asp Leu Thr Pro Gly Ser Glu Ser Asp Lys Asn Asp Ala Ala Ser	
65 70 75 80	
cag cca ggc aac cag tca gac cct ggg aag cag gtt ctc ggc ccc ctc	288
Gln Pro Gly Asn Gln Ser Asp Pro Gly Lys Gln Val Leu Gly Pro Leu	
85 90 95	
agc acc ccg att cct gtg cac act gct gta aag tcc aag tct ttg ggt	336
Ser Thr Pro Ile Pro Val His Thr Ala Val Lys Ser Lys Ser Leu Gly	
100 105 110	
gac agt aag aac cgc cac aaa aag ccc aaa gac ccc aaa cca aag gtg	384
Asp Ser Lys Asn Arg His Lys Lys Pro Lys Asp Pro Lys Pro Lys Val	
115 120 125	
aag aag ctc aaa tac cat cag tac atc ccc cca gac cag aag gca gag	432
Lys Lys Leu Lys Tyr His Gln Tyr Ile Pro Pro Asp Gln Lys Ala Glu	
130 135 140	
aac tct ccc cca ccc atg gac tct gcc tat gcc cgg ctc ctc cag caa	480
Asn Ser Pro Pro Pro Met Asp Ser Ala Tyr Ala Arg Leu Leu Gln Gln	
145 150 155 160	
cag cag cta ttc ctg cag cta cag atc ctc agc cag cag cag caa cag	528
Gln Gln Leu Phe Leu Gln Leu Gln Ile Leu Ser Gln Gln Gln Gln Gln	
165 170 175	
cag cag caa cag cag cag cag caa cag cag cag cag cag cag cag	576
Gln Gln Gln Gln Gln Gln Gln Gln Gln Gln Gln Gln Gln Gln Gln	
180 185 190	
cgg ttc agc tac cct ggg atg cac caa aca cac ctc aaa gaa cca aat	624
Arg Phe Ser Tyr Pro Gly Met His Gln Thr His Leu Lys Glu Pro Asn	
195 200 205	
gaa cag atg gcc aga aat ccg aat cct tct tca aca cca ctg agc aat	672
Glu Gln Met Ala Arg Asn Pro Asn Pro Ser Ser Thr Pro Leu Ser Asn	
210 215 220	
acc cct cta tcc cct gtc aaa aat agv att tct gga caa act ggt gtt	720
Thr Pro Leu Ser Pro Val Lys Asn Xaa Ile Ser Gly Gln Thr Gly Val	
225 230 235 240	
tct tct ctc aaa cca ggc ccc ctc cca ccc aac ctg gat' gat ctc aag	768
Ser Ser Leu Lys Pro Gly Pro Leu Pro Pro Asn Leu Asp Asp Leu Lys	
245 250 255	

gtg tca gag tta aga caa cag ctt cga atc cgg ggc ttg cca gtg tca	816
Val Ser Glu Leu Arg Gln Gln Leu Arg Ile Arg Gly Leu Pro Val Ser	
260 265 270	
ggc acc aag aca gcg ctg gtg gac cgg ctt cgt ccc ttc cag gat tgt	864
Gly Thr Lys Thr Ala Leu Val Asp Arg Leu Arg Pro Phe Gln Asp Cys	
275 280 285	
gct ggc aac cct gtg ccc aac ttt ggg gac atc aca act gtc acc ttt	912
Ala Gly Asn Pro Val Pro Asn Phe Gly Asp Ile Thr Thr Val Thr Phe	
290 295 300	
cct gtc acg ccc aac acc ttg ccc agt tat cag tcc tcc ccg aca ggc	960
Pro Val Thr Pro Asn Thr Leu Pro Ser Tyr Gln Ser Ser Pro Thr Gly	
305 310 315 320	
ttc tac cac ttt ggc agc aca agc tcc agc cca ccc atc tcc ccc gcc	1008
Phe Tyr His Phe Gly Ser Thr Ser Ser Ser Pro Pro Ile Ser Pro Ala	
325 330 335	
tca tct gac ttg tcc gct gca ggg tcc ctg cca gac acc ttc acc gat	1056
Ser Ser Asp Leu Ser Ala Ala Gly Ser Leu Pro Asp Thr Phe Thr Asp	
340 345 350	
gcg tca cct ggc ttc ggc ctg cac gca tct ccg gtg ccc gcc tgc acg	1104
Ala Ser Pro Gly Phe Gly Leu His Ala Ser Pro Val Pro Ala Cys Thr	
355 360 365	
gac gag agt ctg ctg agc agc ctg aat ggg ggc tcg ggc ccc tcc gag	1152
Asp Glu Ser Leu Leu Ser Ser Leu Asn Gly Gly Ser Gly Pro Ser Glu	
370 375 380	
cct gat ggg cta gac tct gag aag gac aag atg ctg gtg gag aag cag	1200
Pro Asp Gly Leu Asp Ser Glu Lys Asp Lys Met Leu Val Glu Lys Gln	
385 390 395 400	
aaa gtg atc aac cag ctc acc tgg aag ctg cgg caa gag cag cgg cag	1248
Lys Val Ile Asn Gln Leu Thr Trp Lys Leu Arg Gln Glu Gln Arg Gln	
405 410 415	
gtg gaa gag ctg aga atg caa ctg cag aag cag aag agc agc tgc agc	1296
Val Glu Glu Leu Arg Met Gln Leu Gln Lys Gln Lys Ser Ser Cys Ser	
420 425 430	
gac cag aag cca ctc ccc ttc ttg gcc acc acc atc aaa cag gaa gat	1344
Asp Gln Lys Pro Leu Pro Phe Leu Ala Thr Thr Ile Lys Gln Glu Asp	
435 440 445	
gtc tcc agc tgc ccc ttc gca ccc cag cag gcg tct ggg aag gga cag	1392
Val Ser Ser Cys Pro Phe Ala Pro Gln Gln Ala Ser Gly Lys Gly Gln	
450 455 460	
ggc cac agc tct gac agt ccc cct ccg gct tgt gag acg gct cag ctg	1440
Gly His Ser Ser Asp Ser Pro Pro Pro Ala Cys Glu Thr Ala Gln Leu	

465	470	475	480	
ctg cct cac tgt gtg gag tcc tca ggt caa acc cat gta ctc tcg tcc				1488
Leu Pro His Cys Val Glu Ser Ser Gly Gln Thr His Val Leu Ser Ser	485	490	495	
acg ttt ctc agc ccc cag tgc tcc cct cag cac tcg ccc cgt ggg ggc				1536
Thr Phe Leu Ser Pro Gln Cys Ser Pro Gln His Ser Pro Arg Gly Gly	500	505	510	
ctg aag agc ccg cag cac atc agc ctg cct cca tca ccc aac aac cat				1584
Leu Lys Ser Pro Gln His Ile Ser Leu Pro Pro Ser Pro Asn Asn His	515	520	525	
tac ttc ctg gct tcc tct tcg gga gct cag aga gag aac cat ggg gtc				1632
Tyr Phe Leu Ala Ser Ser Ser Gly Ala Gln Arg Glu Asn His Gly Val	530	535	540	
tct tca ccc agc agc agc caa ggg tgc gca cag atg act ggt tta caa				1680
Ser Ser Pro Ser Ser Ser Gln Gly Cys Ala Gln Met Thr Gly Leu Gln	545	550	555	560
tct tct gac aag gtg ggg cca acg ttt tca att cca tcc cca act ttt				1728
Ser Ser Asp Lys Val Gly Pro Thr Phe Ser Ile Pro Ser Pro Thr Phe	565	570	575	
tct aag tca agt tca gca gtt tca gat atc acc cag ccc cca tcc tat				1776
Ser Lys Ser Ser Ser Ala Val Ser Asp Ile Thr Gln Pro Pro Ser Tyr	580	585	590	
gaa gat gca gtg aag cag caa atg act cgg agt cag cag atg gac gaa				1824
Glu Asp Ala Val Lys Gln Gln Met Thr Arg Ser Gln Gln Met Asp Glu	595	600	605	
ctc ctg gat gtc ctc att gaa agt gga gaa atg cca gcc gat gcc agg				1872
Leu Leu Asp Val Leu Ile Glu Ser Gly Glu Met Pro Ala Asp Ala Arg	610	615	620	
gaa gat cat tca tgt ctt cag aaa att cca aag atc cct ggg tcc tcc				1920
Glu Asp His Ser Cys Leu Gln Lys Ile Pro Lys Ile Pro Gly Ser Ser	625	630	635	640
tgc agc cca act gcc atc ccc ccg aag ccc tcg gct tcc ttt gag cag				1968
Cys Ser Pro Thr Ala Ile Pro Pro Lys Pro Ser Ala Ser Phe Glu Gln	645	650	655	
gca tct tcg gga ggc cag atg gcc ttc gat cac tac gca aac gac agt				2016
Ala Ser Ser Gly Gly Gln Met Ala Phe Asp His Tyr Ala Asn Asp Ser	660	665	670	
gac gaa cac ctg gaa gtc tta ttg aat tct cac agc ccc atc gga aag				2064
Asp Glu His Leu Glu Val Leu Leu Asn Ser His Ser Pro Ile Gly Lys	675	680	685	
gtg agc gat gtt acc ctc ctc aaa atc gga agc gag gag cct cct ttt				2112

Val	Ser	Asp	Val	Thr	Leu	Leu	Lys	Ile	Gly	Ser	Glu	Glu	Pro	Pro	Phe		
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gac agc atc atg gat ggc ttc cca ggg aag gct gcg gaa gat ctc ttc 2160																	
Asp	Ser	Ile	Met	Asp	Gly	Phe	Pro	Gly	Lys	Ala	Ala	Glu	Asp	Leu	Phe		
705					710					715				720			
agt gct cac gag ctc ttg cct ggg ccc ctc tcc ccg atg cat gca cag 2208																	
Ser	Ala	His	Glu	Leu	Leu	Pro	Gly	Pro	Leu	Ser	Pro	Met	His	Ala	Gln		
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ttg tca cct cct tct gtg gac agc agt ggt ctg cag ctg agc tta ccg 2256																	
Leu	Ser	Pro	Pro	Ser	Val	Asp	Ser	Ser	Gly	Leu	Gln	Leu	Ser	Leu	Pro		
			740						745					750			
gaa tct cct tgg gaa aca atg gaa tgg ctg gac ctc act cca cct agt 2304																	
Glu	Ser	Pro	Trp	Glu	Thr	Met	Glu	Trp	Leu	Asp	Leu	Thr	Pro	Pro	Ser		
			755						760					765			
tcc acg cca ggc ttc agc aac ctt acc tcc agt ggg ccc agc att ttc 2352																	
Ser	Thr	Pro	Gly	Phe	Ser	Asn	Leu	Thr	Ser	Ser	Gly	Pro	Ser	Ile	Phe		
			770											780			
aac atc gat ttt ctg gat gtt aca gat ctt aat ctg aat tcc cct atg 2400																	
Asn	Ile	Asp	Phe	Leu	Asp	Val	Thr	Asp	Leu	Asn	Leu	Asn	Ser	Pro	Met		
785					790					795					800		
gat ctc cac tta cag cag tgg taa 2424																	
Asp	Leu	His	Leu	Gln	Gln	Trp											
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			20					25					30			
Gly Leu Ser Pro Asp Gln Ala Arg Ser Glu Asp Pro Gln Gly Ser Thr																
		35					40					45				
Gly Ser Thr Pro Asp Ile Lys Ser Thr Glu Ala Pro Leu Asp Thr Ile																
		50				55					60					

Gln Asp Leu Thr Pro Gly Ser Glu Ser Asp Lys Asn Asp Ala Ala Ser
 65 70 75 80

Gln Pro Gly Asn Gln Ser Asp Pro Gly Lys Gln Val Leu Gly Pro Leu
 85 90 95

Ser Thr Pro Ile Pro Val His Thr Ala Val Lys Ser Lys Ser Leu Gly
 100 105 110

Asp Ser Lys Asn Arg His Lys Lys Pro Lys Asp Pro Lys Pro Lys Val
 115 120 125

Lys Lys Leu Lys Tyr His Gln Tyr Ile Pro Pro Asp Gln Lys Ala Glu
 130 135 140

Asn Ser Pro Pro Pro Met Asp Ser Ala Tyr Ala Arg Leu Leu Gln Gln
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Gln Gln Leu Phe Leu Gln Leu Gln Ile Leu Ser Gln Gln Gln Gln Gln
 165 170 175

Gln Gln Gln Gln Gln Gln Gln Gln Gln Gln Gln Gln Gln Gln Gln
 180 185 190

Arg Phe Ser Tyr Pro Gly Met His Gln Thr His Leu Lys Glu Pro Asn
 195 200 205

Glu Gln Met Ala Arg Asn Pro Asn Pro Ser Ser Thr Pro Leu Ser Asn
 210 215 220

Thr Pro Leu Ser Pro Val Lys Asn Xaa Ile Ser Gly Gln Thr Gly Val
 225 230 235 240

Ser Ser Leu Lys Pro Gly Pro Leu Pro Pro Asn Leu Asp Asp Leu Lys
 245 250 255

Val Ser Glu Leu Arg Gln Gln Leu Arg Ile Arg Gly Leu Pro Val Ser
 260 265 270

Gly Thr Lys Thr Ala Leu Val Asp Arg Leu Arg Pro Phe Gln Asp Cys
 275 280 285

Ala Gly Asn Pro Val Pro Asn Phe Gly Asp Ile Thr Thr Val Thr Phe
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Pro Val Thr Pro Asn Thr Leu Pro Ser Tyr Gln Ser Ser Pro Thr Gly
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Phe Tyr His Phe Gly Ser Thr Ser Ser Ser Pro Pro Ile Ser Pro Ala
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Ser Ser Asp Leu Ser Ala Ala Gly Ser Leu Pro Asp Thr Phe Thr Asp
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Ala Ser Pro Gly Phe Gly Leu His Ala Ser Pro Val Pro Ala Cys Thr

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Asp Glu Ser Leu Leu Ser Ser Leu Asn Gly Gly Ser Gly Pro Ser Glu				
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Pro Asp Gly Leu Asp Ser Glu Lys Asp Lys Met Leu Val Glu Lys Gln				
385		390		400
Lys Val Ile Asn Gln Leu Thr Trp Lys Leu Arg Gln Glu Gln Arg Gln				
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Val Glu Glu Leu Arg Met Gln Leu Gln Lys Gln Lys Ser Ser Cys Ser				
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Asp Gln Lys Pro Leu Pro Phe Leu Ala Thr Thr Ile Lys Gln Glu Asp				
	435		440	445
Val Ser Ser Cys Pro Phe Ala Pro Gln Gln Ala Ser Gly Lys Gly Gln				
	450		455	460
Gly His Ser Ser Asp Ser Pro Pro Pro Ala Cys Glu Thr Ala Gln Leu				
465		470		480
Leu Pro His Cys Val Glu Ser Ser Gly Gln Thr His Val Leu Ser Ser				
	485		490	495
Thr Phe Leu Ser Pro Gln Cys Ser Pro Gln His Ser Pro Arg Gly Gly				
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Leu Lys Ser Pro Gln His Ile Ser Leu Pro Pro Ser Pro Asn Asn His				
	515		520	525
Tyr Phe Leu Ala Ser Ser Ser Gly Ala Gln Arg Glu Asn His Gly Val				
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Ser Ser Pro Ser Ser Ser Gln Gly Cys Ala Gln Met Thr Gly Leu Gln				
545		550		560
Ser Ser Asp Lys Val Gly Pro Thr Phe Ser Ile Pro Ser Pro Thr Phe				
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Ser Lys Ser Ser Ser Ala Val Ser Asp Ile Thr Gln Pro Pro Ser Tyr				
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Glu Asp Ala Val Lys Gln Gln Met Thr Arg Ser Gln Gln Met Asp Glu				
	595		600	605
Leu Leu Asp Val Leu Ile Glu Ser Gly Glu Met Pro Ala Asp Ala Arg				
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Glu Asp His Ser Cys Leu Gln Lys Ile Pro Lys Ile Pro Gly Ser Ser				
625		630		640
Cys Ser Pro Thr Ala Ile Pro Pro Lys Pro Ser Ala Ser Phe Glu Gln				
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Ala Ser Ser Gly Gly Gln Met Ala Phe Asp His Tyr Ala Asn Asp Ser
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 Asp Glu His Leu Glu Val Leu Leu Asn Ser His Ser Pro Ile Gly Lys
 675 680 685
 Val Ser Asp Val Thr Leu Leu Lys Ile Gly Ser Glu Glu Pro Pro Phe
 690 695 700
 Asp Ser Ile Met Asp Gly Phe Pro Gly Lys Ala Ala Glu Asp Leu Phe
 705 710 715 720
 Ser Ala His Glu Leu Leu Pro Gly Pro Leu Ser Pro Met His Ala Gln
 725 730 735
 Leu Ser Pro Pro Ser Val Asp Ser Ser Gly Leu Gln Leu Ser Leu Pro
 740 745 750
 Glu Ser Pro Trp Glu Thr Met Glu Trp Leu Asp Leu Thr Pro Pro Ser
 755 760 765
 Ser Thr Pro Gly Phe Ser Asn Leu Thr Ser Ser Gly Pro Ser Ile Phe
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 Asp Leu His Leu Gln Gln Trp
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 gtcagtatcg gcggaattcg cggccgcgctc gacctggctg ccactgtact cctaccagg 120
 ggagctcacg gagagttgga tgaattctgg gttgttagct gcggtcagct gggctcccg 180
 gaggcctgttg ctggtggaga acagggggcg cctggccaag ggaccagcgg cttgctgaga 240
 ctcaac atg aca ctc ctg ggg tct gag cat tcc ttg ctg att agg agc 288
 Met Thr Leu Leu Gly Ser Glu His Ser Leu Leu Ile Arg Ser
 1 5 10

aag ttc aga tca gtt tta cag tta aga ctt caa caa aga agg acc cag	336
Lys Phe Arg Ser Val Leu Gln Leu Arg Leu Gln Gln Arg Arg Thr Gln	
15 20 25 30	
gaa caa ctg gct aac caa ggc ata ata cca cca ctg aaa cgt cca gct	384
Glu Gln Leu Ala Asn Gln Gly Ile Ile Pro Pro Leu Lys Arg Pro Ala	
35 40 45	
gaa ttc cat gag caa aga aaa cat ttg gat agt gac aag gct aaa aat	432
Glu Phe His Glu Gln Arg Lys His Leu Asp Ser Asp Lys Ala Lys Asn	
50 55 60	
tcc ctg aag cgc aaa gcc aga aac agg tgc aac agt gcc gac ttg gtt	480
Ser Leu Lys Arg Lys Ala Arg Asn Arg Cys Asn Ser Ala Asp Leu Val	
65 70 75	
aat atg cac ata ctc caa gct tcc act gca gag agg tcc att cca act	528
Asn Met His Ile Leu Gln Ala Ser Thr Ala Glu Arg Ser Ile Pro Thr	
80 85 90	
gct cag atg aag ctg aaa aga gcc cga ctc gcc gat gat ctc aat gaa	576
Ala Gln Met Lys Leu Lys Arg Ala Arg Leu Ala Asp Asp Leu Asn Glu	
95 100 105 110	
aaa att gct cta cga cca ggg cca ctg gag ctg gtg gaa aaa aac att	624
Lys Ile Ala Leu Arg Pro Gly Pro Leu Glu Leu Val Glu Lys Asn Ile	
115 120 125	
ctt cct gtg gat tct gct gtg aaa gag gcc ata aaa ggt aac cag gtg	672
Leu Pro Val Asp Ser Ala Val Lys Glu Ala Ile Lys Gly Asn Gln Val	
130 135 140	
agt ttc tcc aaa tcc acg gat gct ttt gcc ttt gaa gag gac agc agc	720
Ser Phe Ser Lys Ser Thr Asp Ala Phe Ala Phe Glu Glu Asp Ser Ser	
145 150 155	
agc gat ggg ctt tct ccg gat cag act cga agt gaa gac ccc caa aac	768
Ser Asp Gly Leu Ser Pro Asp Gln Thr Arg Ser Glu Asp Pro Gln Asn	
160 165 170	
tca gcg gga tcc ccg cca gac gct aaa gcc tca gat acc cct tcg aca	816
Ser Ala Gly Ser Pro Pro Asp Ala Lys Ala Ser Asp Thr Pro Ser Thr	
175 180 185 190	
ggg tct ctg ggg aca aac cag gat ctt gct tct ggc tca gaa aat gac	864
Gly Ser Leu Gly Thr Asn Gln Asp Leu Ala Ser Gly Ser Glu Asn Asp	
195 200 205	
aga aat gac tca gcc tca cag ccc agc cac cag tca gat gcg ggg aag	912
Arg Asn Asp Ser Ala Ser Gln Pro Ser His Gln Ser Asp Ala Gly Lys	
210 215 220	
cag ggg ctt ggc ccc ccc agc acc ccc ata gcc gtg cat gct gct gta	960
Gln Gly Leu Gly Pro Pro Ser Thr Pro Ile Ala Val His Ala Ala Val	
225 230 235	

aag tcc aaa tcc ttg ggt gac agt aag aac cgc cac aaa aag ccc aag	1008
Lys Ser Lys Ser Leu Gly Asp Ser Lys Asn Arg His Lys Lys Pro Lys	
240 245 250	
gac ccc aag cca aag gtg aag aag ctt aaa tat cac cag tac att ccc	1056
Asp Pro Lys Pro Lys Val Lys Lys Leu Lys Tyr His Gln Tyr Ile Pro	
255 260 265 270	
cca gac cag aag gca gag aag tcc cct cca cct atg gac tca gcc tac	1104
Pro Asp Gln Lys Ala Glu Lys Ser Pro Pro Pro Met Asp Ser Ala Tyr	
275 280 285	
gct cgg ctg ctc cag caa cag cag ctg ttc ctg cag ctc caa atc ctc	1152
Ala Arg Leu Leu Gln Gln Gln Gln Leu Phe Leu Gln Leu Gln Ile Leu	
290 295 300	
agc cag cag cag cag cag cag caa cac cga ttc agc tac cta ggg atg	1200
Ser Gln Gln Gln Gln Gln Gln His Arg Phe Ser Tyr Leu Gly Met	
305 310 315	
cac caa gct cag ctt aag gaa cca aat gaa cag atg gtc aga aat cca	1248
His Gln Ala Gln Leu Lys Glu Pro Asn Glu Gln Met Val Arg Asn Pro	
320 325 330	
aac tct tct tca acg cca ctg agc aat acc ccc ttg tct cct gtc aaa	1296
Asn Ser Ser Ser Thr Pro Leu Ser Asn Thr Pro Leu Ser Pro Val Lys	
335 340 345 350	
aac agt ttt tct gga caa act ggt gtc tct tct ttc aaa cca ggc cca	1344
Asn Ser Phe Ser Gly Gln Thr Gly Val Ser Ser Phe Lys Pro Gly Pro	
355 360 365	
ctc cca cct aac ctg gat gat ctg aag gtc tct gaa tta aga caa cag	1392
Leu Pro Pro Asn Leu Asp Asp Leu Lys Val Ser Glu Leu Arg Gln Gln	
370 375 380	
ctt cga att cgg ggc ttg cct gtg tca ggc acc aaa acg gct ctc atg	1440
Leu Arg Ile Arg Gly Leu Pro Val Ser Gly Thr Lys Thr Ala Leu Met	
385 390 395	
gac cgg ctt cga ccc ttc cag gac tgc tct ggc aac cca gtg ccg aac	1488
Asp Arg Leu Arg Pro Phe Gln Asp Cys Ser Gly Asn Pro Val Pro Asn	
400 405 410	
ttt ggg gat ata acg act gtc act ttt cct gtc aca ccc aac acg ctg	1536
Phe Gly Asp Ile Thr Thr Val Thr Phe Pro Val Thr Pro Asn Thr Leu	
415 420 425 430	
ccc aat tac cag tct tcc tct tct acc agt gcc ctg tcc aac ggc ttc	1584
Pro Asn Tyr Gln Ser Ser Ser Ser Thr Ser Ala Leu Ser Asn Gly Phe	
435 440 445	
tac cac ttt ggc agc acc agc tcc agc ccc ccg atc tcc cca gcc tcc	1632
Tyr His Phe Gly Ser Thr Ser Ser Ser Pro Pro Ile Ser Pro Ala Ser	

450	455	460	
tct gac ctg tca gtc gct ggg tcc ctg ccg gac acc ttc aat gat gcc			1680
Ser Asp Leu Ser Val Ala Gly Ser Leu Pro Asp Thr Phe Asn Asp Ala			
465	470	475	
tcc ccc tcc ttc ggc ctg cac ccg tcc cca gtc cac gtg tgc acg gag			1728
Ser Pro Ser Phe Gly Leu His Pro Ser Pro Val His Val Cys Thr Glu			
480	485	490	
gaa agt ctc atg agc agc ctg aat ggg ggc tct gtt cct tct gag ctg			1776
Glu Ser Leu Met Ser Ser Leu Asn Gly Gly Ser Val Pro Ser Glu Leu			
495	500	505	510
gat ggg ctg gac tcc gag aag gac aag atg ctg gtg gag aag cag aag			1824
Asp Gly Leu Asp Ser Glu Lys Asp Lys Met Leu Val Glu Lys Gln Lys			
515	520	525	
gtg atc aat gaa ctc acc tgg aaa ctc cag caa gag cag agg cag gtg			1872
Val Ile Asn Glu Leu Thr Trp Lys Leu Gln Gln Glu Gln Arg Gln Val			
530	535	540	
gag gag ctg agg atg cag ctt cag aag cag aaa agg aat aac tgt tca			1920
Glu Glu Leu Arg Met Gln Leu Gln Lys Gln Lys Arg Asn Asn Cys Ser			
545	550	555	
gag aag aag ccg ctg cct ttc ctg gct gcc tcc atc aag cag gaa gag			1968
Glu Lys Lys Pro Leu Pro Phe Leu Ala Ala Ser Ile Lys Gln Glu Glu			
560	565	570	
gct gtc tcc agc tgt cct ttt gca tcc caa gta cct gtg aaa aga caa			2016
Ala Val Ser Ser Cys Pro Phe Ala Ser Gln Val Pro Val Lys Arg Gln			
575	580	585	590
agc agc agc tca gag tgt cac cca ccg gct tgt gaa gct gct caa ctc			2064
Ser Ser Ser Ser Glu Cys His Pro Pro Ala Cys Glu Ala Ala Gln Leu			
595	600	605	
cag cct ctt gga aat gct cat tgt gtg gag tcc tca gat caa acc aat			2112
Gln Pro Leu Gly Asn Ala His Cys Val Glu Ser Ser Asp Gln Thr Asn			
610	615	620	
gta ctt tct tcc aca ttt ctc agc ccc cag tgt tcc cct cag cat tca			2160
Val Leu Ser Ser Thr Phe Leu Ser Pro Gln Cys Ser Pro Gln His Ser			
625	630	635	
ccg ctg ggg gct gtg aaa agc cca cag cac atc agt ttg ccc cca tca			2208
Pro Leu Gly Ala Val Lys Ser Pro Gln His Ile Ser Leu Pro Pro Ser			
640	645	650	
ccc aac aac cct cac ttt ctg ccc tca tcc tcc ggg gcc cag gga gaa			2256
Pro Asn Asn Pro His Phe Leu Pro Ser Ser Ser Gly Ala Gln Gly Glu			
655	660	665	670
ggg cac agg gtc tcc tcg ccc atc agc agc cag gtg tgc act gca cag			2304

Gly His Arg Val Ser Ser Pro Ile Ser Ser Gln Val Cys Thr Ala Gln	
675 680 685	
atg gct ggt tta cac tct tct gat aag gtg ggg cca aag ttt tca att	2352
Met Ala Gly Leu His Ser Ser Asp Lys Val Gly Pro Lys Phe Ser Ile	
690 695 700	
cca tcc cca act ttt tct aag tca agt tca gca att tca gag gta aca	2400
Pro Ser Pro Thr Phe Ser Lys Ser Ser Ser Ala Ile Ser Glu Val Thr	
705 710 715	
cag cct cca tcc tat gaa gat gcc gta aag cag caa atg acc cgg agt	2448
Gln Pro Pro Ser Tyr Glu Asp Ala Val Lys Gln Gln Met Thr Arg Ser	
720 725 730	
cag cag atg gat gaa ctc ctg gac gtg ctt att gaa agc gga gaa atg	2496
Gln Gln Met Asp Glu Leu Leu Asp Val Leu Ile Glu Ser Gly Glu Met	
735 740 745 750	
cca gca gac gct aga gag gat cac tca tgt ctt caa aaa gtc cca aag	2544
Pro Ala Asp Ala Arg Glu Asp His Ser Cys Leu Gln Lys Val Pro Lys	
755 760 765	
ata ccc aga tct tcc cga agt cca act gct gtc ctc acc aag ccc tcg	2592
Ile Pro Arg Ser Ser Arg Ser Pro Thr Ala Val Leu Thr Lys Pro Ser	
770 775 780	
gct tcc ttt gaa caa gcc tct tca ggc agc cag atc ccc ttt gat ccc	2640
Ala Ser Phe Glu Gln Ala Ser Ser Gly Ser Gln Ile Pro Phe Asp Pro	
785 790 795	
tat gcc acc gac agt gat gag cat ctt gaa gtc tta tta aat tcc cag	2688
Tyr Ala Thr Asp Ser Asp Glu His Leu Glu Val Leu Leu Asn Ser Gln	
800 805 810	
agc ccc cta gga aag atg agt gat gtc acc ctt cta aaa att ggg agc	2736
Ser Pro Leu Gly Lys Met Ser Asp Val Thr Leu Leu Lys Ile Gly Ser	
815 820 825 830	
gaa gag cct cac ttt gat ggg ata atg gat gga ttc tct ggg aag gct	2784
Glu Glu Pro His Phe Asp Gly Ile Met Asp Gly Phe Ser Gly Lys Ala	
835 840 845	
gca gaa gac ctc ttc aat gca cat gag atc ttg cca ggc ccc ctc tct	2832
Ala Glu Asp Leu Phe Asn Ala His Glu Ile Leu Pro Gly Pro Leu Ser	
850 855 860	
cca atg cag aca cag ttt tca ccc tct tct gtg gac agc aat ggg ctg	2880
Pro Met Gln Thr Gln Phe Ser Pro Ser Ser Val Asp Ser Asn Gly Leu	
865 870 875	
cag tta agc ttc act gaa tct ccc tgg gaa acc atg gag tgg ctg gac	2928
Gln Leu Ser Phe Thr Glu Ser Pro Trp Glu Thr Met Glu Trp Leu Asp	
880 885 890	

ctc act ccg cca aat tcc aca cca ggc ttt agc gcc ctc acc acc agc 2976
 Leu Thr Pro Pro Asn Ser Thr Pro Gly Phe Ser Ala Leu Thr Thr Ser
 895 900 905 910

agc ccc agc atc ttc aac atc gat ttc ctg gat gtc act gat ctc aat 3024
 Ser Pro Ser Ile Phe Asn Ile Asp Phe Leu Asp Val Thr Asp Leu Asn
 915 920 925

ttg aat tct tcc atg gac ctt cac ttg cag cag tgg tag 3063
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 930 935

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 <213> Homo sapiens

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 Met Thr Leu Leu Gly Ser Glu His Ser Leu Leu Ile Arg Ser Lys Phe
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Arg Ser Val Leu Gln Leu Arg Leu Gln Gln Arg Arg Thr Gln Glu Gln
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Leu Ala Asn Gln Gly Ile Ile Pro Pro Leu Lys Arg Pro Ala Glu Phe
 35 40 45

His Glu Gln Arg Lys His Leu Asp Ser Asp Lys Ala Lys Asn Ser Leu
 50 55 60

Lys Arg Lys Ala Arg Asn Arg Cys Asn Ser Ala Asp Leu Val Asn Met
 65 70 75 80

His Ile Leu Gln Ala Ser Thr Ala Glu Arg Ser Ile Pro Thr Ala Gln
 85 90 95

Met Lys Leu Lys Arg Ala Arg Leu Ala Asp Asp Leu Asn Glu Lys Ile
 100 105 110

Ala Leu Arg Pro Gly Pro Leu Glu Leu Val Glu Lys Asn Ile Leu Pro
 115 120 125

Val Asp Ser Ala Val Lys Glu Ala Ile Lys Gly Asn Gln Val Ser Phe
 130 135 140

Ser Lys Ser Thr Asp Ala Phe Ala Phe Glu Glu Asp Ser Ser Ser Asp
 145 150 155 160

Gly Leu Ser Pro Asp Gln Thr Arg Ser Glu Asp Pro Gln Asn Ser Ala
 165 170 175

Gly Ser Pro Pro Asp Ala Lys Ala Ser Asp Thr Pro Ser Thr Gly Ser
 180 185 190

Leu Gly Thr Asn Gln Asp Leu Ala Ser Gly Ser Glu Asn Asp Arg Asn
 195 200 205

Asp Ser Ala Ser Gln Pro Ser His Gln Ser Asp Ala Gly Lys Gln Gly
 210 215 220

Leu Gly Pro Pro Ser Thr Pro Ile Ala Val His Ala Ala Val Lys Ser
 225 230 235 240

Lys Ser Leu Gly Asp Ser Lys Asn Arg His Lys Lys Pro Lys Asp Pro
 245 250 255

Lys Pro Lys Val Lys Lys Leu Lys Tyr His Gln Tyr Ile Pro Pro Asp
 260 265 270

Gln Lys Ala Glu Lys Ser Pro Pro Pro Met Asp Ser Ala Tyr Ala Arg
 275 280 285

Leu Leu Gln Gln Gln Gln Leu Phe Leu Gln Leu Gln Ile Leu Ser Gln
 290 295 300

Gln Gln Gln Gln Gln Gln His Arg Phe Ser Tyr Leu Gly Met His Gln
 305 310 315 320

Ala Gln Leu Lys Glu Pro Asn Glu Gln Met Val Arg Asn Pro Asn Ser
 325 330 335

Ser Ser Thr Pro Leu Ser Asn Thr Pro Leu Ser Pro Val Lys Asn Ser
 340 345 350

Phe Ser Gly Gln Thr Gly Val Ser Ser Phe Lys Pro Gly Pro Leu Pro
 355 360 365

Pro Asn Leu Asp Asp Leu Lys Val Ser Glu Leu Arg Gln Gln Leu Arg
 370 375 380

Ile Arg Gly Leu Pro Val Ser Gly Thr Lys Thr Ala Leu Met Asp Arg
 385 390 395 400

Leu Arg Pro Phe Gln Asp Cys Ser Gly Asn Pro Val Pro Asn Phe Gly
 405 410 415

Asp Ile Thr Thr Val Thr Phe Pro Val Thr Pro Asn Thr Leu Pro Asn
 420 425 430

Tyr Gln Ser Ser Ser Ser Thr Ser Ala Leu Ser Asn Gly Phe Tyr His
 435 440 445

Phe Gly Ser Thr Ser Ser Ser Pro Pro Ile Ser Pro Ala Ser Ser Asp
 450 455 460

Leu Ser Val Ala Gly Ser Leu Pro Asp Thr Phe Asn Asp Ala Ser Pro
 465 470 475 480

Ser Phe Gly Leu His Pro Ser Pro Val His Val Cys Thr Glu Glu Ser

485					490					495					
Leu	Met	Ser	Ser	Leu	Asn	Gly	Gly	Ser	Val	Pro	Ser	Glu	Leu	Asp	Gly
			500					505					510		
Leu	Asp	Ser	Glu	Lys	Asp	Lys	Met	Leu	Val	Glu	Lys	Gln	Lys	Val	Ile
		515					520					525			
Asn	Glu	Leu	Thr	Trp	Lys	Leu	Gln	Gln	Glu	Gln	Arg	Gln	Val	Glu	Glu
		530					535					540			
Leu	Arg	Met	Gln	Leu	Gln	Lys	Gln	Lys	Arg	Asn	Asn	Cys	Ser	Glu	Lys
		545					550					555			560
Lys	Pro	Leu	Pro	Phe	Leu	Ala	Ala	Ser	Ile	Lys	Gln	Glu	Glu	Ala	Val
				565					570						575
Ser	Ser	Cys	Pro	Phe	Ala	Ser	Gln	Val	Pro	Val	Lys	Arg	Gln	Ser	Ser
			580					585					590		
Ser	Ser	Glu	Cys	His	Pro	Pro	Ala	Cys	Glu	Ala	Ala	Gln	Leu	Gln	Pro
		595					600					605			
Leu	Gly	Asn	Ala	His	Cys	Val	Glu	Ser	Ser	Asp	Gln	Thr	Asn	Val	Leu
		610					615					620			
Ser	Ser	Thr	Phe	Leu	Ser	Pro	Gln	Cys	Ser	Pro	Gln	His	Ser	Pro	Leu
		625					630					635			640
Gly	Ala	Val	Lys	Ser	Pro	Gln	His	Ile	Ser	Leu	Pro	Pro	Ser	Pro	Asn
				645					650						655
Asn	Pro	His	Phe	Leu	Pro	Ser	Ser	Ser	Gly	Ala	Gln	Gly	Glu	Gly	His
			660						665				670		
Arg	Val	Ser	Ser	Pro	Ile	Ser	Ser	Gln	Val	Cys	Thr	Ala	Gln	Met	Ala
			675					680					685		
Gly	Leu	His	Ser	Ser	Asp	Lys	Val	Gly	Pro	Lys	Phe	Ser	Ile	Pro	Ser
			690				695					700			
Pro	Thr	Phe	Ser	Lys	Ser	Ser	Ser	Ala	Ile	Ser	Glu	Val	Thr	Gln	Pro
			705				710					715			720
Pro	Ser	Tyr	Glu	Asp	Ala	Val	Lys	Gln	Gln	Met	Thr	Arg	Ser	Gln	Gln
				725					730						735
Met	Asp	Glu	Leu	Leu	Asp	Val	Leu	Ile	Glu	Ser	Gly	Glu	Met	Pro	Ala
			740					745					750		
Asp	Ala	Arg	Glu	Asp	His	Ser	Cys	Leu	Gln	Lys	Val	Pro	Lys	Ile	Pro
			755				760					765			
Arg	Ser	Ser	Arg	Ser	Pro	Thr	Ala	Val	Leu	Thr	Lys	Pro	Ser	Ala	Ser
			770				775					780			

Phe Glu Gln Ala Ser Ser Gly Ser Gln Ile Pro Phe Asp Pro Tyr Ala
785 790 795 800

Thr Asp Ser Asp Glu His Leu Glu Val Leu Leu Asn Ser Gln Ser Pro
805 810 815

Leu Gly Lys Met Ser Asp Val Thr Leu Leu Lys Ile Gly Ser Glu Glu
820 825 830

Pro His Phe Asp Gly Ile Met Asp Gly Phe Ser Gly Lys Ala Ala Glu
835 840 845

Asp Leu Phe Asn Ala His Glu Ile Leu Pro Gly Pro Leu Ser Pro Met
850 855 860

Gln Thr Gln Phe Ser Pro Ser Ser Val Asp Ser Asn Gly Leu Gln Leu
865 870 875 880

Ser Phe Thr Glu Ser Pro Trp Glu Thr Met Glu Trp Leu Asp Leu Thr
885 890 895

Pro Pro Asn Ser Thr Pro Gly Phe Ser Ala Leu Thr Thr Ser Ser Pro
900 905 910

Ser Ile Phe Asn Ile Asp Phe Leu Asp Val Thr Asp Leu Asn Leu Asn
915 920 925

Ser Ser Met Asp Leu His Leu Gln Gln Trp
930 935

<210> 29

<211> 938

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<400> 29

Met Thr Leu Leu Gly Ser Glu His Ser Leu Leu Ile Arg Ser Lys Phe
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Arg Ser Val Leu Gln Leu Arg Leu Gln Gln Arg Arg Thr Gln Glu Gln
20 25 30

Leu Ala Asn Gln Gly Ile Ile Pro Pro Leu Lys Arg Pro Ala Glu Phe
35 40 45

His Glu Gln Arg Lys His Leu Asp Ser Asp Lys Ala Lys Asn Ser Leu
50 55 60

Lys Arg Lys Ala Arg Asn Arg Cys Asn Ser Ala Asp Leu Val Asn Met
65 70 75 80

His Ile Leu Gln Ala Ser Thr Ala Glu Arg Ser Ile Pro Thr Ala Gln

85					90					95					
Met	Lys	Leu	Lys	Arg	Ala	Arg	Leu	Ala	Asp	Asp	Leu	Asn	Glu	Lys	Ile
			100					105					110		
Ala	Leu	Arg	Pro	Gly	Pro	Leu	Glu	Leu	Val	Glu	Lys	Asn	Ile	Leu	Pro
			115				120					125			
Val	Asp	Ser	Ala	Val	Lys	Glu	Ala	Ile	Lys	Gly	Asn	Gln	Val	Ser	Phe
	130					135					140				
Ser	Lys	Ser	Thr	Asp	Ala	Phe	Ala	Phe	Glu	Glu	Asp	Ser	Ser	Ser	Asp
145						150					155				160
Gly	Leu	Ser	Pro	Asp	Gln	Thr	Arg	Ser	Glu	Asp	Pro	Gln	Asn	Ser	Ala
				165					170					175	
Gly	Ser	Pro	Pro	Asp	Ala	Lys	Ala	Ser	Asp	Thr	Pro	Ser	Thr	Gly	Ser
			180					185					190		
Leu	Gly	Thr	Asn	Gln	Asp	Leu	Ala	Ser	Gly	Ser	Glu	Asn	Asp	Arg	Asn
	195					200						205			
Asp	Ser	Ala	Ser	Gln	Pro	Ser	His	Gln	Ser	Asp	Ala	Gly	Lys	Gln	Gly
	210					215					220				
Leu	Gly	Pro	Pro	Ser	Thr	Pro	Ile	Ala	Val	His	Ala	Ala	Val	Lys	Ser
225						230					235				240
Lys	Ser	Leu	Gly	Asp	Ser	Lys	Asn	Arg	His	Lys	Lys	Pro	Lys	Asp	Pro
			245					250						255	
Lys	Pro	Lys	Val	Lys	Lys	Leu	Lys	Tyr	His	Gln	Tyr	Ile	Pro	Pro	Asp
			260					265					270		
Gln	Lys	Ala	Glu	Lys	Ser	Pro	Pro	Pro	Met	Asp	Ser	Ala	Tyr	Ala	Arg
		275					280					285			
Leu	Leu	Gln	Gln	Gln	Gln	Leu	Phe	Leu	Gln	Leu	Gln	Ile	Leu	Ser	Gln
	290					295					300				
Gln	Gln	Gln	Gln	Gln	Gln	His	Arg	Phe	Ser	Tyr	Leu	Gly	Met	His	Gln
305						310					315				320
Ala	Gln	Leu	Lys	Glu	Pro	Asn	Glu	Gln	Met	Val	Arg	Asn	Pro	Asn	Ser
				325					330					335	
Ser	Ser	Thr	Pro	Leu	Ser	Asn	Thr	Pro	Leu	Ser	Pro	Val	Lys	Asn	Ser
			340					345					350		
Phe	Ser	Gly	Gln	Thr	Gly	Val	Ser	Ser	Phe	Lys	Pro	Gly	Pro	Leu	Pro
		355					360					365			
Pro	Asn	Leu	Asp	Asp	Leu	Lys	Val	Ser	Glu	Leu	Arg	Gln	Gln	Leu	Arg
	370					375					380				

Ile Arg Gly Leu Pro Val Ser Gly Thr Lys Thr Ala Leu Met Asp Arg
 385 390 395 400

Leu Arg Pro Phe Gln Asp Cys Ser Gly Asn Pro Val Pro Asn Phe Gly
 405 410 415

Asp Ile Thr Thr Val Thr Phe Pro Val Thr Pro Asn Thr Leu Pro Asn
 420 425 430

Tyr Gln Ser Ser Ser Ser Thr Ser Ala Leu Ser Asn Gly Phe Tyr His
 435 440 445

Phe Gly Ser Thr Ser Ser Ser Pro Pro Ile Ser Pro Ala Ser Ser Asp
 450 455 460

Leu Ser Val Ala Gly Ser Leu Pro Asp Thr Phe Asn Asp Ala Ser Pro
 465 470 475 480

Ser Phe Gly Leu His Pro Ser Pro Val His Val Cys Thr Glu Glu Ser
 485 490 495

Leu Met Ser Ser Leu Asn Gly Gly Ser Val Pro Ser Glu Leu Asp Gly
 500 505 510

Leu Asp Ser Glu Lys Asp Lys Met Leu Val Glu Lys Gln Lys Val Ile
 515 520 525

Asn Glu Leu Thr Trp Lys Leu Gln Gln Glu Gln Arg Gln Val Glu Glu
 530 535 540

Leu Arg Met Gln Leu Gln Lys Gln Lys Arg Asn Asn Cys Ser Glu Lys
 545 550 555 560

Lys Pro Leu Pro Phe Leu Ala Ala Ser Ile Lys Gln Glu Glu Ala Val
 565 570 575

Ser Ser Cys Pro Phe Ala Ser Gln Val Pro Val Lys Arg Gln Ser Ser
 580 585 590

Ser Ser Glu Cys His Pro Pro Ala Cys Glu Ala Ala Gln Leu Gln Pro
 595 600 605

Leu Gly Asn Ala His Cys Val Glu Ser Ser Asp Gln Thr Asn Val Leu
 610 615 620

Ser Ser Thr Phe Leu Ser Pro Gln Cys Ser Pro Gln His Ser Pro Leu
 625 630 635 640

Gly Ala Val Lys Ser Pro Gln His Ile Ser Leu Pro Pro Ser Pro Asn
 645 650 655

Asn Pro His Phe Leu Pro Ser Ser Ser Gly Ala Gln Gly Glu Gly His
 660 665 670

Arg Val Ser Ser Pro Ile Ser Ser Gln Val Cys Thr Ala Gln Met Ala
 675 680 685
 Gly Leu His Ser Ser Asp Lys Val Gly Pro Lys Phe Ser Ile Pro Ser
 690 695 700
 Pro Thr Phe Ser Lys Ser Ser Ser Ala Ile Ser Glu Val Thr Gln Pro
 705 710 715 720
 Pro Ser Tyr Glu Asp Ala Val Lys Gln Gln Met Thr Arg Ser Gln Gln
 725 730 735
 Met Asp Glu Leu Leu Asp Val Leu Ile Glu Ser Gly Glu Met Pro Ala
 740 745 750
 Asp Ala Arg Glu Asp His Ser Cys Leu Gln Lys Val Pro Lys Ile Pro
 755 760 765
 Arg Ser Ser Arg Ser Pro Thr Ala Val Leu Thr Lys Pro Ser Ala Ser
 770 775 780
 Phe Glu Gln Ala Ser Ser Gly Ser Gln Ile Pro Phe Asp Pro Tyr Ala
 785 790 795 800
 Thr Asp Ser Asp Glu His Leu Glu Val Leu Leu Asn Ser Gln Ser Pro
 805 810 815
 Leu Gly Lys Met Ser Asp Val Thr Leu Leu Lys Ile Gly Ser Glu Glu
 820 825 830
 Pro His Phe Asp Gly Ile Met Asp Gly Phe Ser Gly Lys Ala Ala Glu
 835 840 845
 Asp Leu Phe Asn Ala His Glu Ile Leu Pro Gly Pro Leu Ser Pro Met
 850 855 860
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Leu Ala Asn Gln Gly Leu Ile Pro Pro Leu Lys Gly Pro Thr Glu Phe
35 40 45

His Asp Pro Arg Lys Gln Leu Asp Ser Ala Lys Thr Glu Asp Ser Leu
50 55 60

Arg Arg Lys Gly Arg Asn Arg Ser Asp Arg Ala Ser Leu Val Thr Met
65 70 75 80

His Ile Leu Gln Ala Ser Thr Ala Glu Arg Ser Ile Pro Thr Ala Gln
85 90 95

Met Lys Leu Lys Arg Ala Arg Leu Ala Asp Asp Leu Asn Glu Lys Ile
100 105 110

Ala Leu Arg Gln Gly Pro Leu Glu Leu Val Glu Lys Asn Ile Leu Pro
115 120 125

Met Asp Ser Ser Val Lys Glu Ala Ile Lys Gly Thr Glu Val Ser Leu
130 135 140

Ser Lys Ala Ala Asp Ala Phe Ala Phe Glu Asp Asp Ser Ser Arg Asp
145 150 155 160

Gly Leu Ser Pro Asp Gln Ala Arg Ser Glu Asp Pro Gln Gly Ser Thr
165 170 175

Gly Ser Thr Pro Asp Ile Lys Ser Thr Glu Ala Pro Leu Asp Thr Ile
180 185 190

Gln Asp Leu Thr Pro Gly Ser Glu Ser Asp Lys Asn Asp Ala Ala Ser
195 200 205

Gln Pro Gly Asn Gln Ser Asp Pro Gly Lys Gln Val Leu Gly Pro Leu
210 215 220

Ser Thr Pro Ile Pro Val His Thr Ala Val Lys Ser Lys Ser Leu Gly

225		230		235		240
Asp Ser Lys Asn Arg His Lys Lys Pro Lys Asp Pro Lys Pro Lys Val						
		245		250		255
Lys Lys Leu Lys Tyr His Gln Tyr Ile Pro Pro Asp Gln Lys Ala Glu						
		260		265		270
Lys Ser Pro Pro Pro Met Asp Ser Ala Tyr Ala Arg Leu Leu Gln Gln						
		275		280		285
Gln Gln Leu Phe Leu Gln Leu Gln Ile Leu Ser Gln Gln Gln Gln Gln						
		290		295		300
Gln Gln Gln Gln Gln Gln Gln Gln Gln Gln Gln Gln Gln Gln Gln						
		305		310		315
						320
Arg Phe Ser Tyr Pro Gly Met His Gln Thr His Leu Lys Glu Pro Asn						
		325		330		335
Glu Gln Met Ala Arg Asn Pro Asn Pro Ser Ser Thr Pro Leu Ser Asn						
		340		345		350
Thr Pro Leu Ser Pro Val Lys Asn Ser Ile Ser Gly Gln Thr Gly Val						
		355		360		365
Ser Ser Leu Lys Pro Gly Pro Leu Pro Pro Asn Leu Asp Asp Leu Lys						
		370		375		380
Val Ser Glu Leu Arg Gln Gln Leu Arg Ile Arg Gly Leu Pro Val Ser						
		385		390		395
						400
Gly Thr Lys Thr Ala Leu Val Asp Arg Leu Arg Pro Phe Gln Asp Cys						
		405		410		415
Ala Gly Asn Pro Val Pro Asn Phe Gly Asp Ile Thr Thr Val Thr Phe						
		420		425		430
Pro Val Thr Pro Asn Thr Leu Pro Ser Tyr Gln Ser Ser Pro Thr Gly						
		435		440		445
Phe Tyr His Phe Gly Ser Thr Ser Ser Ser Pro Pro Ile Ser Pro Ala						
		450		455		460
Ser Ser Asp Leu Ser Ala Ala Gly Ser Leu Pro Asp Thr Phe Thr Asp						
		465		470		475
						480
Ala Ser Pro Gly Phe Gly Leu His Ala Ser Pro Val Pro Ala Cys Thr						
		485		490		495
Asp Glu Ser Leu Leu Ser Ser Leu Asn Gly Gly Ser Gly Pro Ser Glu						
		500		505		510
Pro Asp Gly Leu Asp Ser Glu Lys Asp Lys Met Leu Val Glu Lys Gln						
		515		520		525

Lys	Val	Ile	Asn	Gln	Leu	Thr	Trp	Lys	Leu	Arg	Gln	Glu	Gln	Arg	Gln	530	535	540	
Val	Glu	Glu	Leu	Arg	Met	Gln	Leu	Gln	Lys	Gln	Lys	Ser	Ser	Cys	Ser	545	550	555	560
Asp	Gln	Lys	Pro	Leu	Pro	Phe	Leu	Ala	Thr	Thr	Ile	Lys	Gln	Glu	Asp	565	570	575	
Val	Ser	Ser	Cys	Pro	Phe	Ala	Pro	Gln	Gln	Ala	Ser	Gly	Lys	Gly	Gln	580	585	590	
Gly	His	Ser	Ser	Asp	Ser	Pro	Pro	Pro	Ala	Cys	Glu	Thr	Ala	Gln	Leu	595	600	605	
Leu	Pro	His	Cys	Val	Glu	Ser	Ser	Gly	Gln	Thr	His	Val	Leu	Ser	Ser	610	615	620	
Thr	Phe	Leu	Ser	Pro	Gln	Cys	Ser	Pro	Gln	His	Ser	Pro	Leu	Gly	Gly	625	630	635	640
Leu	Lys	Ser	Pro	Gln	His	Ile	Ser	Leu	Pro	Pro	Ser	Pro	Asn	Asn	His	645	650	655	
Tyr	Phe	Leu	Ala	Ser	Ser	Ser	Gly	Ala	Gln	Arg	Glu	Asn	His	Gly	Val	660	665	670	
Ser	Ser	Pro	Ser	Ser	Ser	Gln	Gly	Cys	Ala	Gln	Met	Thr	Gly	Leu	Gln	675	680	685	
Ser	Ser	Asp	Lys	Val	Gly	Pro	Thr	Phe	Ser	Ile	Pro	Ser	Pro	Thr	Phe	690	695	700	
Ser	Lys	Ser	Ser	Ser	Ala	Val	Ser	Asp	Ile	Thr	Gln	Pro	Pro	Ser	Tyr	705	710	715	720
Glu	Asp	Ala	Val	Lys	Gln	Gln	Met	Thr	Arg	Ser	Gln	Gln	Met	Asp	Glu	725	730	735	
Leu	Leu	Asp	Val	Leu	Ile	Glu	Ser	Gly	Glu	Met	Pro	Ala	Asp	Ala	Arg	740	745	750	
Glu	Asp	His	Ser	Cys	Leu	Gln	Lys	Ile	Pro	Lys	Ile	Pro	Gly	Ser	Ser	755	760	765	
Cys	Ser	Pro	Thr	Ala	Ile	Pro	Pro	Lys	Pro	Ser	Ala	Ser	Phe	Glu	Gln	770	775	780	
Ala	Ser	Ser	Gly	Gly	Gln	Met	Ala	Phe	Asp	His	Tyr	Ala	Asn	Asp	Ser	785	790	795	800
Asp	Glu	His	Leu	Glu	Val	Leu	Leu	Asn	Ser	His	Ser	Pro	Ile	Gly	Lys	805	810	815	

Val	Ser	Asp	Val	Thr	Leu	Leu	Lys	Ile	Gly	Ser	Glu	Glu	Pro	Pro	Phe	820	825	830	
Asp	Ser	Ile	Met	Asp	Gly	Phe	Pro	Gly	Lys	Ala	Ala	Glu	Asp	Leu	Phe	835	840	845	
Ser	Ala	His	Glu	Leu	Leu	Pro	Gly	Pro	Leu	Ser	Pro	Met	His	Ala	Gln	850	855	860	
Leu	Ser	Pro	Pro	Ser	Val	Asp	Ser	Ser	Gly	Leu	Gln	Leu	Ser	Phe	Thr	865	870	875	880
Glu	Ser	Pro	Trp	Glu	Thr	Met	Glu	Trp	Leu	Asp	Leu	Thr	Pro	Pro	Ser	885	890	895	
Ser	Thr	Pro	Gly	Phe	Ser	Asn	Leu	Thr	Ser	Ser	Gly	Pro	Ser	Ile	Phe	900	905	910	
Asn	Ile	Asp	Phe	Leu	Asp	Val	Thr	Asp	Leu	Asn	Leu	Asn	Ser	Pro	Met	915	920	925	
Asp	Leu	His	Leu	Gln	Gln	Trp										930	935		